User Manual

MultiBoard

G8x-7xxx/-8xxx
PS/2 Models

1 Advantages

- CHERRY MX key technology with Gold Crosspoint contacts (G80)
- CHERRY FTSC key technology (G81)
- Robust and reliable
- Programmable keyboard
- Programming can be selected – manually or via software macros
- Integrated memory
- UnifiedPOS supported (OPOS/JavaPOS)

Available in two different sizes:
- Standard format: 8xxx series
- Compact format: 7xxx series

Alongside the functions of a standard keyboard, the MultiBoard keyboards offer the following additional functions depending on the model:
- Magnetic card reader
- Barcode decoder
- Touchpad
- Additional keys (extended layout)
- Inscribable keys

2 Connecting the keyboard

1 Shut down the system.
2 Insert the PS/2 plug(s) into the corresponding system ports.
3 Restart the system.

3 Magnetic card reader

The magnetic card reader reads all cards written with data conforming to DIN ISO 7811/12, Gemini, AAMVA and JIS. Tracks can be read individually, in pairs or all together. The data is converted into corresponding key codes and is transferred to the system via the PS/2 port.

Using the magnetic card reader

1 Insert magnetic card into the right-hand side of the magnetic card reader with the magnetic strips downward and facing toward the keyboard.
2 Swipe magnetic card through the magnetic card reader to the left.

An audible tone (beep) confirms a valid reading for each track.

You can configure the tone using the **CHERRY Tools** software: Switch the valid reading signal on/off.

4 Barcode decoder (optional)

Certain keyboard models come with an integrated barcode decoder. You can connect up to two reading devices to these keyboards using the following external ports (barcode scanner not included in scope of delivery):

Barcode ports on the keyboard:
- 9-pin DE9 D-sub connector (barcode 1) on the rear
- 6-pin DIN socket (barcode 2) on the right-hand side

4.1 Connecting the barcode scanner

1 Shut down the system before plugging in the barcode scanner.
2 Only connect barcode scanners with a maximum power requirement of 150 mA. (This maximum value applies even when connecting more than one barcode scanner.)
3 Observe the safety regulations specified by the manufacturer of the barcode scanner. The basic setting for a connected barcode scanner is "laser emulation."

The data is converted into corresponding character strings and is transferred to the system via the PS/2 port.

An audible tone (beep) confirms a valid reading.

You can configure the tone using the **CHERRY Tools** software: Switch the valid reading signal on/off or set to continuous.

5 Touchpad (Model MX 8100 only)

The touchpad replaces the mouse. You can move the mouse cursor with your finger, and select and drag objects.

Move the mouse cursor

➢ Move your finger across the touchpad.

Double-click

➢ Touch the touchpad twice in quick succession.

6 Configuration

6.1 Header and terminator

The header and terminator identify the start and finish of the transfer of magnetic card or barcode data. The header/terminator sequence is inserted before/after the actual data.

6.2 Physical and virtual configuration

You can configure the keyboard physically or virtually.

Advantages of physical configuration:

- Once the configuration has been loaded to the keyboard, it is stored there indefinitely
- The keyboard can be used on other systems with the appropriate settings
- Functions independently from the operating system
- No additional software support/drivers required

Advantages of virtual configuration:

- The configuration file is stored on the respective system
- The configuration is executed in the form of a software macro
- Additional functionality

6.3 Storage Capacity

All models except MY 8300

	Physical configuration	Virtual configuration
Keys	Max. 16 characters per key	Approx. 2000 characters per key
Header	Max. 16 characters per track	Not possible
Terminator	Max. 16 characters per track	Not possible

MY 8300

	Physical configuration	Virtual configuration
Program-mable function keys (PF)	Max. 64 characters per key per layer. Max. 10 layers (240 configuration spaces)	Approx. 2000 characters per key at layer 1. (Only layer 1 can be configured virtually.)

7 Installation of the software

7.1 CHERRY Tools

Install the **CHERRY Tools** software.

You can configure all the functions of the keyboard with the **Designer** found within the software.

The following functions are supported:

- Configuring the keyboard/keys/barcode decoder/magnetic card reader
- Updating the country-specific settings (country table)
- Updating the firmware
- Displaying the key configuration (KeyViewer)

Operation instructions are included in the direct help for the **CHERRY Tools** software. It offers you information where you need it and can be called up with **F1**.

Latest software version on the internet

The software is subject to constant development. The latest version is available on the Internet under: **http://support.cherry.de**

1 Insert your CD in the CD-ROM drive.

The CD-ROM starts automatically.

2 If the CD-ROM does not start automatically, double click on the CD-ROM drive in Windows-Explorer and then on the file **autostart.exe**.

3 Follow the installation instructions on the screen.

7.2 Restoring the basic setting

1 Open the **CHERRY Tools** software.

2 Read out the active configuration of the keyboard.

3 Select **Restore standard values** in the menu bar under **Configuration**.

4 Save this configuration to the keyboard by clicking on the **Activate** button.

The basic keyboard setting is restored.

7.3 CHERRY UPOS support

The standards OPOS and JavaPOS are combined and constantly developed (www.nrf-arts.org) under the umbrella of the UPOS (Unified Point of Sale) specification.

If you use applications which access the keyboard or the magnetic card reader via OPOS or JavaPOS:

Windows operating system

➢ Install the software **CHERRY OPOS Support** or **CHERRY JPOS Support**.

Linux operating system

➢ Use the installation scripts for JavaPOS support on the CD-ROM.

8 Manual configuration (all models except MY 8300)

You can also configure the keyboard manually without installing any software. Physical configuration is always used in this case.

8.1 Configuring magnetic card readers, barcode readers and general keyboard functions

1 Launch a text editor such as Notepad or Word so that you can keep track of any input or output on the monitor.

2 Only use the number keys on the keyboard block, not those on the numerical keypad.

3 Select configuration mode by pressing the six modifier keys simultaneously for at least three seconds: **left Shift key**, **left Ctrl key**, **left Alt key**, **right Shift key**, **right Ctrl key**, **right Alt Gr key**.

A double beep is emitted to confirm that you are now in configuration mode. Provided you have activated this option, **MENU ENTRY** is displayed in the editor.

4 To configure the magnetic card reader, barcode decoder or general keyboard functions, enter the corresponding programming code as necessary (see "Codes for manual programming" on page 15). Each code consists of at least three key presses.

If the entry is correct, a short beep is emitted. If the entry is incorrect, a long beep is emitted.

5 Enter the header/terminator sequence if necessary.

After entering the string, press the **Enter** key on the numeric keypad.

6 Continue with the configuration or exit configuration mode by pressing the **spacebar**.

A double beep is emitted as confirmation. Provided you have activated this option, **MENU EXIT** is displayed in the editor.

Example 1: Magnetic card reader, activating track 1

1 Start a text editor.

2 Select configuration mode.

3 Press the **J**, **1**, **Y** keys followed by the **spacebar**.

Example 2: Magnetic card reader, track 1, defining and activating the header

1 Start a text editor.

2 Select configuration mode.

3 Enter the sequence **V**, **5** followed by the required string (for example **MSRH1**), press the **Enter** key on the numeric keypad and then press the **spacebar**.

8.2 Configuring keys

1 Launch a text editor such as Notepad or Word so that you can keep track of any input or output on the monitor.

2 Only use the number keys on the keyboard block, not those on the numerical keypad.

3 Select configuration mode by pressing the six modifier keys simultaneously for at least three seconds: **left Shift key**, **left Ctrl key**, **left Alt key**, **right Shift key**, **right Ctrl key**, **right Alt Gr key**.

A double beep is emitted to confirm that you are now in configuration mode. A menu is displayed in the editor.

4 Press the key to be configured.

You can configure any key that is not part of the keyboard block (alpha field).

5 Enter the string/key combination.

6 To complete the configuration, press the configured key again.

If the entry is correct, a short beep is emitted. If the entry is incorrect or the maximum storage capacity has been reached, a long beep is emitted.

7 Press the next key to be configured or exit configuration mode by pressing the **spacebar**.

A double beep is emitted as confirmation.

Example: Assigning a string to the "Pause" key

1 Start a text editor.

2 Select configuration mode.

3 Press the **Pause** key followed by the required string (for example **0815**), press the **Pause** key again and then the **spacebar**.

8.3 Resetting the configured key to the basic setting

1 Start a text editor.

2 Select configuration mode.

3 Press the configured key twice.

4 Exit configuration mode by pressing the **spacebar**.

9 Manual configuration (MY 8300 model)

You can assign any key combinations to each of the 24 programmable function keys (PF) with a max. of 10 layers (240 configuration spaces).

The active layer (0 to 9) appears on the seven-segment display.

9.1 Permanently switching a layer

1 Press the **Layer** key.

The display starts to flash.

2 Select the layer using the keys **F1** to **F10**:
Layer 0: **F10** key
Layer 1 to 9: **F1** to **F9** key

9.2 Temporarily switching a layer

To quickly output a key sequence configured to a different layer, use the following keys:

Key	Function
Alt	1 layer higher
Shift	2 layers higher
Ctrl	4 layers higher

By combining the keys, the values are added up.

Example: You are currently on layer 0 and want to output a key sequence that is assigned to programmable function key (PF) 1 on layer 3.

➢ Press the **Alt**, **Shift** and **PF1** keys simultaneously.

The key sequence saved to the third layer is output.

9.3 Configuring keys from PF1 to PF24

1 Launch a text editor such as Notepad or Word so that you can keep track of any input or output on the monitor.

2 Select configuration mode by pressing the **Prog** key.

The decimal point on the seven-segment display flashes.

3 Press the **PF key** to be configured.

4 Enter the string/key combination.

5 Press another **PF key** that you would like to configure.

6 Exit configuration mode by pressing the **Prog** key.

The decimal point on the seven-segment display is no longer illuminated.

Example: Assigning the text "Test" to the PF1 key

➢ Press the following keys in sequence: **Prog**, **PF1**, **T**, **E**, **S**, **T**, **Prog**.

9.4 Deleting the memory content of a PF key

1 Select configuration mode by pressing the **Prog** key.

2 Press the configured key.

3 Exit configuration mode by pressing the **Prog** key.

9.5 Deleting the memory content of a layer

1 Press the **Layer** key.

The display starts to flash.

2 Select the layer you wish to delete using the keys **F1** to **F10**.

3 Select configuration mode by pressing the **Prog** key.

The decimal point on the seven-segment display flashes.

4 Simultaneously press the **Ctrl**, **Alt** and **Del** keys.

5 Exit configuration mode by pressing the **Prog** key.

The decimal point on the seven-segment display is no longer illuminated.

9.6 Setting the output delay

In order to modify the string output according to type of computer or program, you can choose between 12 different delay times.

Key	Delay in msec
F1	0
F2	2
F3	4
F4	6
F5	8
F6	10
F7	20
F8	30
F9	50

Key	Delay in msec
F10	70
F11	100
F12	200

1 Select configuration mode by pressing the **Prog** key.

  The decimal point on the seven-segment display flashes.

2 Press the key between **F1** and **F12** that corresponds to the delay time.

3 Exit configuration mode by pressing the **Prog** key.

  The decimal point on the seven-segment display is no longer illuminated.

Configuration example: Setting a delay time of 30 msec

➢ Press the **Prog**, **F8**, and **Prog** keys in that order.

Changes to the caps lock or number lock status after pressing a PF key

If number lock or caps lock is activated, this status may change following the string output. This occurs if there is insufficient delay time and can be resolved by setting a longer delay time.

10 Cleaning of the keyboard

Caution!

Damage may be caused by harsh cleaning agents or liquids in the keyboard

1 Do not use solutions such as gasoline or alcohol and scouring agents or scouring sponges for cleaning.

2 Prevent fluids from entering the devices.

3 Do not remove the keycaps of the keyboard.

1 Clean the keyboard with a slightly damp cloth and some mild cleaning agent (e.g.: dishwashing liquid).

2 Dry off the devices with a soft, lint-free cloth.

11 RSI syndrome

RSI syndrome

RSI stands for "Repetitive Strain Injury". RSI arises due to small movements continuously repeated over a long period of time.

Typical symptoms are discomfort in the fingers or neck. For further information see: **www.cherry.de/english/service/servicedownload_rsi.htm**

1 Set up your workspace ergonomically.

2 Change the angle of the keyboard using the rear supports.

3 Take several short breaks, with stretching exercises if necessary.

4 Change your posture often.

12 Disposal

Dispose of the old unit via a collecting point for electronic scrap or via your dealer.

13 Technical data

13.1 Overview

Model (item no.)	Mag-netic card reader	Exten-ded key layout	Touch-pad	Blank keys which can be labeled
MY 7000 (G81-7000)	X			
MX 8000 (G80-8200)	X	X		X
MY 8000 (G81-8000)	X			
MX 8100 (G80-8113)	X	X	X	X
MY 8300 (G81-8308)		X		X

13.2 Keyboard

Designation	Value
Port	PS/2 plug
Power supply	+5 V/DC ±5 % SELV
Current consumption (without barcode reader)	Max. 100 mA
Storage temperature range	–20 °C to +60 °C
Operating temperature range	0 °C to +50 °C

13.3 Magnetic card reader

Designation	Value
Tracks	Max. 3
Reading speed	3 to 125 ips at 75 bpi 3 to 50 ips at 210 bpi
Standards	ISO 7811/-12, JIS 1, AAMVA, Gemini

13.4 Barcode decoder

Designation	Value
Reading speed	3 to 400 ips

The following barcodes are automatically recognized and decoded:

- EAN code
- UPC code
- Code39
- Code 93
- Code128
- Codabar
- Code 11
- Code 16K
- Interleaved 2/5 code
- Industrial 2/5 code
- Matrix 2/5 code
- Plessey
- MSI (Modified Plessey)

14 Contact

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Germany

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Telephone:
Sales: +49 (0) 180 5 243779* (0180 5 CHERRY*)

Technical support: +49 (0) 180 5 919108*
(*14 euro cent/min. from German landlines, prices may vary for calls made from mobile networks.)

Please have the following information on hand when contacting technical support:

- Item and serial no. of the product
- Name and manufacturer of your system
- Operating system and, if applicable, installed service pack version

15 General advice

CHERRY, a brand of ZF Friedrichshafen AG, continuously optimizes its products as new technologies are developed. For this reason we reserve the right to make technical alterations. The evaluation of product reliability and the definition of the product's technical performance are carried out according to our own requirements in order to meet internationally recognized regulations and standards. Requirements in addition to these can be met through mutual cooperation. Improper usage, handling, storage and external influences could lead to faults and defects during use.

We do not accept warranty for defects caused by alterations to our product by the user and shall not be held liable for unauthorized modifications. All repairs must be made by us or an officially appointed organization or person.

Possible compensation claims against ZF Friedrichshafen AG or its nominated officers – whatever the legal justification including physical or stress related injuries – are excluded. Exceptions to this exist in the case of intent or gross negligence on the part of ZF Friedrichshafen AG, infringements of Product Liability Law or in cases of injury, bodily harm or risk to health. These operating instructions only apply to the accompanying product.

Full details can be obtained from your distributor or direct from us.

16 Federal Communications Commission (FCC) Radio Frequency Interference Statement

Information to the user: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorientate or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For UL

For use with Listed Personal Computers only!

使用說明書

多元鍵盤

G8x-7xxx/-8xxx
PS/2

1 優點

- CHERRY MX- 按键技术，采用 Gold Crosspoint 黄金触点 （G80）
- CHERRY FTSC- 按键技术 （G81）
- 坚实耐用、可靠
- 可程式化鍵盤
- 编程方式可选 – 物理编程或者通过软件宏程序进行编程
- 集成式存储器
- 支持 UnifiedPOS （OPOS/JavaPOS）

兩種尺寸的保護套可供選購：
- 標準尺寸：型號 8xxx
- 精緻尺寸：型號 7xxx

除了标准键盘的功能之外， MultiBoard 键盘还具有下列附加功能 （视型号而定）：
- 磁卡读卡器
- 條碼解碼器
- 触控板
- 热键 （扩展布局）
- 可重贴按键标签

2 鍵盤連接

1 請關閉您的系統。
2 請將 PS/2 接頭插入對應的系統插槽。
3 請開啓您的系統。

3 磁卡讀卡機

磁卡讀卡機可讀取所有依 DIN ISO 7811/12、Gemini、AAMVA 以及 JIS 寫入的卡片。磁卡讀卡機可讀取個別、單組或整體的軌跡。資料會轉化爲相符之鍵碼，經由 PS/2 介面，傳輸到系統。

磁卡讀卡機使用說明

1 將磁卡的磁條朝下，對著鍵盤插入磁卡讀卡機右側。
2 將磁卡往左刷過磁卡讀卡機。
感應時發出嗶聲表示讀取成功。
您可以透過 **CHERRY Tools** 軟體建構嗶聲資訊：讀卡成功出入的訊號。

4 條碼解碼器 (選配)

特定的鍵盤型號具有整合條碼解碼器。本鍵盤可提供您以下的外部介面，可連接最多兩個讀取裝置 (條碼解碼器，不在傳遞的數位內容中)：

鍵盤的條碼介面：
- 9 極 D-Sub 插槽 DE9 (條碼 1) 接入背面
- 6 極 DIN 插座 (條碼 2) 接入右側

4.1 連接條碼解碼器

1 接入條碼解碼器之前，請先關閉本系統。
2 僅能接上總計最大用電量爲 150 mA 的條碼解碼器。(即使連接多台條碼解碼器，仍不可超出該數值。)
3 請注意條碼解碼器製造商的安全規定。已接通條碼解碼器的基本調整爲擬雷射。

資料將轉化爲相對應的字元列，經由 PS/2 介面，傳輸到系統。
嗶聲表示讀取成功。
您可透過 **CHERRY Tools** 軟體建構嗶聲資訊：讀卡成功出入、期間的訊號。

5 触控板 (MX 8100)

触控板可替代鼠标。用手指进行触摸，即可移动鼠标指针、选择以及拖动对象。

移动鼠标指针
➢ 将手指滑过触控板。

双击
➢ 用手指迅速点击两次触控板。

6 組態

6.1 標題列與終端

標題列與終端標示出磁卡 / 條碼資訊傳輸的開始與結束。標題列 / 終端序列會在原本的訊息之前 / 之後寫入。

6.2 實體與虛擬組態

以實體與虛擬的方式進行鍵盤組態。

實體組態的優點：
- 組態只需載入鍵盤一次，即可儲存
- 鍵盤的作業可針對不同的系統有相對應的調整
- 作業系統的獨立性
- 不需其他軟體 / 驅動器支援

虛擬組態的優點：
- 組態訊息會儲存於各系統中
- 組態會以軟體巨集的模式執行
- 擴充功能性

6.3 貯存量

MY 8300 以外的所有型號

	實體組態	虛擬組態
按鍵	每個按鍵最多 16 字元	每個按鍵約 2000 字元
標題列	每個軌跡最多 16 字元	不可能
終端	每個軌跡最多 16 字元	不可能

MY 8300

	實體組態	虛擬組態
可程式化的功能鍵盤 (PF)	每層每個鍵盤最多 64 字元。 最多 10 層 (240 組態位置)	每層每個鍵盤約 2000 字元。 (您只能虛擬建構第一層。)

7 軟體安裝

7.1 CHERRY Tools

請安裝 **CHERRY Tools** 軟體。

透過其中的 **Designer**，您可以設定所有鍵盤功能。

支援功能如下：
- 鍵盤組態 / 按鍵 / 條碼解碼器 / 磁卡讀卡機
- 啓動在地調整 (國家列表)
- 啓動韌體
- 顯示鍵盤組態 (鍵盤檢視器)

在 **CHERRY Tools** 的帮助文件中有关于操作的说明。这里有您所需要查看的说明，点击 **F1** 即可将其打开。

在互联网中下载最新版软件

本软件始终处于更新之中。可通过互联网下载最新版本：**http://support.cherry.de**

1 将光盘放入光驱之中。

光驱自动启动。

2 如果光驱没有自动启动，请在 Windows 资源管理器中双击光驱图标，然后双击文件 **autostart.exe**。

3 按照屏幕上的安装提示进行操作。

7.2 再次製造基本調整

1 請開啓 **CHERRY Tools** 軟體。

2 請挑選鍵盤運作中的組態。

3 請選擇**組態**底下功能表的選單項目重新製作**標準數據**。

4 請按**啓動**按鈕，將該組態存入鍵盤內。

重新製作鍵盤的基本調整。

7.3 **CHERRY UPOS** 支持

基于 UPOS（Unified Point of Sale）规范对 OPOS 和 JavaPOS 标准进行合并与开发 （www.nrf-arts.org）。如果要使用通过 OPOS 或者 JavaPOS 对键盘或者磁卡读卡器进行访问的应用程序：

Windows 操作系统

- 请安装 **CHERRY OPOS** 支持或者 **CHERRY JPOS** 支持软件。

Linux 操作系统

- 请使用光驱上的 JavaPOS 支持程序的安装脚本。

8 手動組態 (MY 8300 以外的所有機型)

你也可以不需安裝軟體，以手動方式建構鍵盤。選擇該方式時，只能以實體建構。

8.1 磁卡讀卡機、條碼解碼器和一般鍵盤功能的組態

1 請開啓記事本或 Word 等文件編輯器，以便追蹤螢幕上的輸入和輸出。
2 僅能使用鍵盤區的數字按鍵，而非數字鍵盤區的按鍵。
3 請同時按下 6 個切換鍵至少三秒鐘來啓動組態模式：**左 shift 鍵**、**左 Ctrl**、**Alt 鍵**、**右 shift 鍵**、**右 Ctrl**、**右 Alt Ctrl**。
發出兩個嗶嗶聲，證實您正在組態模式。一旦啓動該選項，編輯器會出現 **MENU ENTRY** 的訊息。
4 或者在磁卡讀卡機、條碼解碼器或一般鍵盤功能的組態，請輸入各自的程式碼 (請參閱 Codes for manual programming，15)。每個碼至少連按 3 次鍵。
輸入正確時，會發出短暫的嗶聲。輸入錯誤時，會發出較長的嗶聲。
5 或者請輸入標題列 / 終端的序列。
請按下數字鍵盤區的**輸入**鍵，結束本字元序列。
6 繼續進行組態或按**空白鍵**，離開組態模式。
執行成功時，會發出兩聲嗶嗶聲。一旦啓動該選項，編輯器會出現 **MENU EXIT** 的訊息。

例 1：磁卡讀卡機，啓動軌跡 1

1 請開啓一個文件編輯器。
2 請開啓組態模式。
3 請依序按下 **J**、**1**、**Y** 鍵和**空白鍵**。

例 2：磁卡讀卡機，軌跡 1，定義並開啓標題列

1 請開啓一個文件編輯器。
2 請開啓組態模式。
3 請依序按下 **V**、**5** 鍵，所要求的字元序列 (例如 **MSRH1**)，數字按鍵區的**輸入鍵**和**空白鍵**。

8.2 按鍵組態

1 請開啓記事本或 Word 等文件編輯器，以便追蹤螢幕上的輸入和輸出。
2 僅能使用鍵盤區的數字按鍵，而非數字鍵盤區的按鍵。
3 請同時按下 6 個切換鍵至少三秒鐘來啓動組態模式：**左 shift 鍵**、**左 Ctrl**、**Alt 鍵**、**右 shift 鍵**、**右 Ctrl**、**右 Alt Ctrl**。
發出兩個嗶嗶聲，證實您正在組態模式。編輯器顯示一個功能表。
4 請按下組態鍵。
你可建構鍵盤區 (Alpha 鍵盤區) 以外的所有按鍵。
5 輸入字元序列 / 按鍵序列。
6 請再次按下組態鍵，結束組態。
輸入正確時，會發出短暫的嗶聲。輸入錯誤或達儲存量時，會發出較長的嗶聲。
7 請按下下一個組態鍵或按**空白鍵**離開組態模式。
執行成功時，會發出兩聲嗶嗶聲。

例：以字元序列佔用「暫停」鍵

1 請開啓一個文件編輯器。
2 請開啓組態模式。
3 依序按下**暫停鍵**，所要求的字元序列 (例如 **0815**)、**暫停**和**空白鍵**。

8.3 組態鍵回到基本調整

1 請開啓一個文件編輯器。
2 請開啓組態模式。
3 連按兩次組態鍵。
4 請按**空白鍵**離開組態模式。

9 手動組態 (MY 8300 模式)

您可將每 24 個可程式化功能鍵 (PF) 在至多 10 個圖層以任何一個按鍵序列指定 (240 組態位置)。

啓動的圖層 (0 ... 9) 以七段顯示單元加以顯示。

9.1 圖層持續切換

1 請按**圖層鍵**。
顯示開始閃爍。
2 請按 **F1** 到 **F10** 其中一個鍵，選擇圖層：
圖層 0：**F10** 鍵
圖層 1 到 9：**F1** 到 **F9** 鍵

9.2 圖層的暫時切換

請使用以下按鍵，以快速輸出其他圖層的組態按鍵序：

按鍵	功能
Alt	高一層
轉換	高兩層
Ctrl	高四層

組合按鍵時，數據會增加。
例：您正在圖層 0，想輸入一個鍵盤序，在可程式化功能鍵 (PF) 的圖層 3 輸入 1。

➢ 請同時按下 **Alt** 鍵，**切換**及 **PF1**。
儲存於圖層三的按鍵序將被輸入。

9.3 請執行 PF1 按鍵組態直到 PF 24

1 請開啓記事本或 Word 等文件編輯器，以便追蹤螢幕上的輸入和輸出。
2 請按下 **Prog** 鍵開啓組態模式。
七段顯示單元的十進位點閃爍。
3 請按執行組態的 **PF 鍵**。
4 輸入字元序列 / 按鍵序列。
5 或請按其他你想組態的 **PF 鍵**。
6 請按下 **Prog** 鍵離開組態模式。
七段顯示單元的十進位點熄滅。

例：以文本「Test」指定 PF1 鍵

➢ 請依序按下 **Prog**、**PF1**、**T**、**E**、**S**、**T**、**Prog** 鍵。

9.4 刪除 PF 鍵的儲存內容

1 請按下 **Prog** 鍵開啓組態模式。
2 請按下組態鍵。
3 請按下 **Prog** 鍵離開組態模式。

9.5 刪除圖層的儲存內容

1 請按**圖層鍵**。
顯示開始閃爍。
2 請按 **F1** 到 **F10** 選擇您要刪除的圖層。
3 請按下 **Prog** 鍵開啓組態模式。
七段顯示單元的十進位點閃爍。
4 請同時按下 **Ctrl**、**Alt**、**Del** 鍵
5 請按下 **Prog** 鍵離開組態模式。
七段顯示單元的十進位點熄滅。

9.6 輸出延遲調整

爲適應電腦機型或程式的字元序列輸出，您可調整 12 種不同的延遲時間。

按鍵	每毫秒延遲
F1	0
F2	2
F3	4
F4	6
F5	8
F6	10
F7	20
F8	30
F9	50
F10	70
F11	100
F12	200

1 請按下 **Prog** 鍵開啓組態模式。
七段顯示單元的十進位點閃爍。
2 請按下符合延遲時間的 **F1** 到 **F12** 鍵。
3 請按下 **Prog** 鍵離開組態模式。
七段顯示單元的十進位點熄滅。

組態例：調整延遲時間爲 30 毫秒

➢ 請依序按下 **Prog**、**F8**、**Prog** 鍵。

按下 PF 鍵後已改變的 Shift 或 Num 狀態

切換爲 Shift 或 Num 鍵時，這些狀態可能會在字元序列輸出後改變。這種現象會在延遲時間過短時出現，會遭更高的延遲時間消除。

10 清洁键盘

小心！
腐蚀性清洁剂或者液体进入设备会造成损伤
1 不可使用汽油或酒精之类的溶剂，也不可使用研磨剂或者硬海绵进行清洁。
2 要防止液体进入键盘之中。
3 不要移去键盘的键帽。

1 使用略微蘸湿的擦布或者温和的清洁剂对键盘进行清洁 （例如餐具洗涤剂）
2 用没有毛絮的软擦布将键盘擦干。

11 RSI- 症狀

RSI- 症狀

RSI 全名爲 "Repetitive Strain Injury" = " 重複壓力傷害 "。RSI 產生自微小，不斷重複的動作。

典型症狀爲手指或頸部疼痛。

1 請依人體工學調整您的工作位置。
2 請就您的上手臂和手腕保持於身體側邊及伸展開的位置擺放鍵盤。
3 請經常休息，例如伸展身體。
4 請經常改變您的身體姿勢。

12 廢棄物處理

請將舊鍵盤送至電子資源回收處或是您的經銷商。

13 技術資訊

13.1 概述

機型 (型號)	磁卡讀卡機	擴充按鍵編輯面版	觸控板	可標籤化按鍵
MY 7000 (G81-7000)	X			
MX 8000 (G80-8200)	X	X		X
MY 8000 (G81-8000)	X			
MX 8100 (G80-8113)	X	X	X	X
MY 8300 (G81-8308)		X		X

13.2 鍵盤

標籤	數據
介面	PS/2 插槽
電源供應	+5 V/DC ± 5 % SELV
耗電量 (不包括條碼解碼器)	最大 100 mA
存放溫度	-20 ° C ... +60 ° C
作業溫度	0 ° C ... +50 ° C

13.3 磁卡讀卡機

標籤	數據
軌跡	最多 3
讀取速度	75 bpi 時， 爲 3 ... 125 ips 210 bpi 時， 爲 3 ... 50 ips
標準	ISO 7811/-12, JIS 1, AAMVA, Gemini

13.4 條碼解碼器

標籤	數據
讀取速度	3 ... 400 ips

自動辨識並解碼以下條碼：

- EAN code
- UPC code
- Code39
- Code 93
- Code128
- Codabar
- Code 11
- Code 16K
- Interleaved 2/5 code
- Industrial 2/5 code
- Matrix 2/5 code
- Plessey
- MSI (Modified Plessey)

14 聯絡方式

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Electronic Systems
Cherrystraße
91275 Auerbach
Germany

www.cherry.de

電子郵件地址：info@cherry.de

電話：

售貨專線：+49 (0) 180 5 243779*
(0180 5 CHERRY*)
技術支援：+49 (0) 180 5 919108*

(* 以德國市內電話費率 14 分 / 分鐘, 手機費率視網路而異)

詢問技術支援時，請備妥以下資訊：

功 t 產品品號和序號

功 t 您電腦系統的名稱與製造商

功 t 作業系統和可能的服務套裝軟體之安裝版本

15 一般使用者須知

ZF Friedrichshafen AG 的代表品牌 CHERRY，一向致力於發產新技術以最佳化產品。因此，我們保留技術變更的需要。經內部依據國際規定和標準檢驗，確立可靠度與技術資訊定義。不正確的使用、擺放和外在因素可能導致干擾和損壞。

本公司不擔保因使用者個人行爲改變產品而造成的故障，對未經授權之變更，亦概不負責。所有的維修必須全由本公司或官方授權之人士或組織支援。

ZF Friedrichshafen AG 或其代表對於任何提出損害賠償 (包括壓力相關之傷害)，無論法學基礎爲何，均無賠償責任。除非因蓄意、完全過失或無法符合必要之產品責任規定造成生命、身體或健康的損害。本說明書僅對隨附之產品有效。

詳細資訊請洽各代表或直接向本公司索取。

1 Keyboard options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Define delay time (for barcode, magnetic card, keys)	Z	1	0-9		Delay time between the codes: 0 = w/o delay; 1 = 2 ms; 2 = 4 ms; 3 = 6 ms; 4 = 8 ms; 5 = 10 ms; 6 = 15 ms; 7 = 20 ms; 8 = 40 ms; 9 = 70 ms	6 (15 ms)
Send downcode only: Transmission of downcodes only (for barcode & magnetic card)	Z	2	Y/N		Y = transmission of downcode only; N = transmission of both down- & upcodes	N
Keyclick	Z	3	Y/N		Y = enable; N = disable	N
Online programming: Viewing the information output during manual prog. mode	Z	4	Y/N		Y = enable; N = disable	Y
Output of configuration settings	Z	5			Output of current configuration settings (e.g. to an open editor application).	

2 Magnetic card options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
TrioVing/Gemini card decoding	D	1	Y/N		Y = enable; N = disable	Y
SiPass/AAMVA card decoding	D	2	Y/N		Y = enable; N = disable	Y
JIS2 card decoding	D	4	Y/N		Y = enable; N = disable	Y
ISO card decoding	D	5	Y/N		Y = enable; N = disable	Y
Bidirectional reading	D	3	Y/N		Y = card swipe right to left and vice versa N = card swipe right to left only	Y
Buzzer for good read	D	6	Y/N		Y = buzzer on; N = buzzer off	Y
Track 1 reading	J	1	Y/N		Y = enable; N = disable	Y
Track 2 reading	J	2	Y/N		Y = enable; N = disable	Y
Track 3 reading	J	3	Y/N		Y = enable; N = disable	Y
Stop character check (per track)	J	5	Y/N		Y = If stop character is correct the track data is transmitted (the stop character itself is not output). If stop character is incorrect or not found on card the track data is not transmitted. N = Data is transmitted without verification of the stop character.	Y
LRC checksum verification	J	6	Y/N		Y = If LRC checksum is correct data is transmitted (the LRC byte itself is not output). N = Data is transmitted without verification of LRC checksum.	Y
Send data immediately after card swipe	J	7	Y/N		Y = All data is transmitted no matter the tracks on the card differ from the tracks enabled. N = The keyboard checks if data is read from all tracks enabled. If a track is missed no data is transmitted at all.	Y
Define track 1 header (& enable)	V	5	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Disable track 1 header	V	1	N		N = disable	N
Define track 1 terminator (& enable)	W	5	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable track 1 terminator	W	1	N		N = disable	N
Define track 2 header (& enable)	V	6	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable track 2 header	V	2	N		N = disable	N
Define track 2 terminator (& enable)	W	6	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable track 2 terminator	W	2	N		N = disable	N
Define track 3 header (& enable)	V	7	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable track 3 header	V	3	N		N = disable	N
Define track 3 terminator (& enable)	W	7	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable track 3 terminator	W	3	N		N = disable	N

3 General bar code options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Welch Allyn code ID transmission	R	1	Y/N		Y = enable; N = disable	N
AIM code ID transmission	R	2	Y/N		Y = enable; N = disable	N
AIM modifier transmission	R	3	Y/N		Y = enable; N = disable	N
Laser voting	R	4	Y/N		Compare 3 consecutive scans before data transmission; Y = enable; N = disable	Y

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Buzzer for good read	R	5	Y/N		Y = buzzer on; N = buzzer off	Y
Set all barcode options to factory default	R	6				
Disable all barcode options	R	7				
Interface setting	R	8	1-3		1 = automatic detection; 2 = barcode 1: wand & barcode 2: laser; 3 = barcode 1: laser & barcode 2: wand	1
Define barcode 1 header (& enable)	Q	3	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable barcode 1 header	Q	1	N			N
Define barcode 1 terminator (& enable)	T	3	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable barcode 1 terminator	T	1	N			N
Define barcode 2 header (& enable)	Q	4	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable barcode 2 header	Q	2	N			N
Define barcode 2 terminator (& enable)	T	4	[sequence]	Enter [num]	[sequence] = Enter the data you want programmed here. Enter [num] = Hit the numeric keypad enter key to end programming sequence.	not def.
Disable barcode 2 terminator	T	2	N			N

4 EAN/JAN symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
EAN13 decoding	E	1	Y/N		Y = enable; N = disable	Y
EAN8 decoding	E	2	Y/N		Y = enable; N = disable	Y
Transmission of check digit	E	3	Y/N		Check digit transmitted, if available; Y = enable; N = disable	Y
UPC/EAN addendum	E	4	Y/N		Y = required; N = not required	N
EAN 2 digit addendum	E	5	Y/N		Y = enable; N = disable	Y
Enable EAN 5 digit addendum	E	6	Y/N		Y = enable; N = disable	Y

5 UPC symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
UPC-A decoding	U	1	Y/N		12 digit UPC-A Code; Y = enable; N = disable	Y
UPC-EO decoding (zero suppression)	U	2	Y/N		Output with zero suppression; Y = enable; N = disable	Y
UPC-E1 decoding	U	3	Y/N		Output with non zero suppression; Y = enable; N = disable	Y
UPC-E expand to UPC-A format	U	4	Y/N		8 digit label expanded to 12 digits output; Y = enable; N = disable	N
Transmission of system digit for expanded format (12 digit)	U	5	Y/N		Y = enable; N = disable	Y
Transmission of check digit for expanded format (12 digit)	U	6	Y/N		Y = enable; N = disable	Y
Transmission of system digit for compressed format (8 digit)	U	7	Y/N		Y = enable; N = disable	Y
Transmission of check digit for compressed format (8 digit)	U	8	Y/N		Y = enable; N = disable	Y
2 digit addendum	U	9	Y/N		Y = enable; N = disable	Y
5 digit addendum	U	0	Y/N		Y = enable; N = disable	Y

6 Code39 symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Code39 decoding	A	1	Y/N		Y = enable; N = disable	Y
Start/Stop character output	A	2	Y/N		Y = enable; N = disable	N
Check digit to accept label	A	3	Y/N		Y = only label with check digit accepted; N = check digit not required	N
Check digit transmission	A	4	Y/N		Y = enable; N = disable	N
Full ASCII decoding (extended 39)	A	5	Y/N		Y = enable; N = disable	N
Adaptive algorithm	A	6	Y/N		Aggressive algorithm to accept bad labels (greater tolerance); Y = enable; N = disable	N
Append option (chaining of labels)	A	7	Y/N		Y = enable; N = disable	N

7 Code 93 symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Code 93 decoding	G	1	Y/N		Y = enable; N = disable	Y

8 Code128 symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Mode A character set	C	1	Y/N		Y = enable; N = disable	Y
Mode B character set	C	2	Y/N		Y = enable; N = disable	Y
Mode C character set	C	3	Y/N		Y = enable; N = disable	Y
Leading FNC1 to accept label	C	4	Y/N		Y = required; N = not required	N
Transmission of FNC digit	C	5	Y/N		FNCx character transmitted if available; Y = enable; N = disable	N

9 Codabar symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Codabar decoding	F	1	Y/N		Y = enable; N = disable	Y
Transmission of start/stop character	F	2	Y/N		Y = enable; N = disable	N
Concatenation (chaining of labels) possible	F	3	Y/N		Y = enable; N = disable	Y
Concatenation (chaining of labels) required	F	4	Y/N		Y = required; N = not required	N

10 Code 11 symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Code 11 decoding	H	1	Y/N		Y = enable; N = disable	Y
Only 1 Check digit required to accept label	H	2	Y/N		Y = required; N = not required	N

11 Code 16K symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Code 16K decoding	K	1	Y/N		Y = enable; N = disable	Y
Leading FNC1 to accept label	K	2	Y/N		Y = required; N = not required	N
Transmission of FNC digit	K	3	Y/N		FNCx character transmitted if available; Y = enable; N = disable	N
Click on successfully read row	K	4	Y/N		Y = enable; N = disable	N

12 Interleaved 2/5 symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Interleaved 2/5 decoding	I	1	Y/N		Y = enable; N = disable	Y
Check digit to accept label	I	2	Y/N		Y = required; N = not required	N
Transmission of check digit	I	3	Y/N		Check digit transmitted, if available; Y = enable; N = disable	N
Adaptive algorithm selected	I	4	Y/N		Aggressive algorithm to accept bad labels (greater tolerance); Y = enable; N = disable	N

13 Industrial 2/5 symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Straight Industrial 2/5 decoding	S	1	Y/N		Y = enable; N = disable	Y
IATA 2/5 decoding	S	2	Y/N		Y = enable; N = disable	Y
IATA 2/5 Mod7 check digit	S	3	Y/N		Y = required; N = not required	N

14 Matrix 2/5 symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Matrix 2/5 decoding	X	1	Y/N		Y = enable; N = disable	Y

15 Plessey symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
Plessey decoding	P	1	Y/N		Y = enable; N = disable	Y

16 MSI symbology options

Options	Programming string (by keystroke)				Comment	Default
	1st	2nd	3rd	4th		
MSI decoding	M	1	Y/N		Y = enable; N = disable	Y